What is claimed is:

1. A data quantizing device for quantizing orthogonal

transformed coefficients by using a quantizing table,

comprising:

a comparing unit for deciding whether or not

quantized coefficients will be '0' by comparing said

orthogonal transformed coefficients with corresponding

coefficients in said quantizing table; and

a control unit for controlling so that only said

orthogonal transformed coefficients with said quantized

coefficients of not '0' may be quantized.

2. The data quantizing device as claimed in claim 1,

wherein said comparing unit comprises a shift circuit for

shifting said orthogonal transformed coefficients as binary

data, and a comparator for comparing the orthogonal

transformed coefficients thus shifted with the

corresponding coefficients in said quantizing table, and

outputting as bit data results of comparison deciding

whether or not said quantized coefficients will be '0'.

3. The data quantizing device as claimed in claim 2,

wherein said shift circuit operates to shift said

orthogonal transformed coefficients as the binary data by one bit toward an upper bit side.

4. The data quantizing device as claimed in claim 1, wherein said control unit comprises a quantization predicting register for storing decided results of comparison indicative of whether or not said quantized coefficients will be '0', a memory for storing said orthogonal transformed coefficients, a read control circuit for reading the decided results of comparison from said quantization predicting register and causing only the orthogonal transformed coefficients with the quantized coefficients of not '0' to be read from said memory, and a quantizer for dividing the orthogonal transformed coefficients read from said memory with the corresponding coefficients in said quantizing table so as to output quantized results.

5. The data quantizing device as claimed in claim 2, wherein said control unit comprises a quantization predicting register for storing decided results of comparison indicative of whether or not said quantized coefficients will be '0', a memory for storing said orthogonal transformed coefficients, a read control circuit

for reading the decided results of comparison from said quantization predicting register and causing only the orthogonal transformed coefficients with the quantized coefficients of not '0' to be read from said memory, and a quantizer for dividing the orthogonal transformed coefficients read from said memory with the corresponding coefficients in said quantizing table so as to output quantized results.

6.   The data quantizing device as claimed in claim 3, wherein said control unit comprises a quantization predicting register for storing decided results of comparison indicative of whether or not said quantized coefficients will be '0', a memory for storing said orthogonal transformed coefficients, a read control circuit for reading the decided results of comparison from said quantization predicting register and causing only the orthogonal transformed coefficients with the quantized coefficients of not '0' to be read from said memory, and a quantizer for dividing the orthogonal transformed coefficients read from said memory with the corresponding coefficients in said quantizing table so as to output quantized results.

7. The data quantizing device as claimed in claim 1, wherein said comparing unit comprises a shift circuit for shifting said orthogonal transformed coefficients as binary data, and a comparator for comparing the orthogonal transformed coefficients thus shifted with the corresponding coefficients in said quantizing table, whereupon said comparator outputs '0' when it decides that the quantized coefficients will be '0' and outputs said orthogonal transformed coefficients when it decides that the quantized coefficients will not be '0'.

8. The data quantizing device as claimed in claim 7, wherein said control unit comprises a memory for storing the output of said comparator, and a quantizer for quantizing only the orthogonal transformed coefficients of not '0' read from said memory by dividing them by the corresponding coefficients in said quantizing table.

9. The data quantizing device as claimed in claim 8, wherein said quantizer comprises a quantizing circuit for quantizing only the orthogonal transformed coefficients of not '0', an all-0 detection circuit for detecting said orthogonal transformed coefficients of '0', and a selector for selectively outputting the quantized coefficients which

are output from said quantizing circuit according to
results detected by said all-0 detection circuit or
otherwise '0'.

10.   The data quantizing device as claimed in claim 6,
wherein said decided results of comparison are written to
said quantization predicting register by using the address
signals used to write said orthogonal transformed
coefficients to said memory.

11.   The data quantizing device as claimed in claim 6,
wherein said decided results of comparison are read from
said quantization predicting register by using address
signals used to read said orthogonal transformed
coefficients from said memory.

12.   The data quantizing device as claimed in claim 6,
wherein when said decided results of comparison are read
from said quantization predicting register, 0-run length is
obtained by counting the number of the decided results of
comparison of successive '0'.

13.   The data quantizing device as claimed in claim 8,
wherein when output of said comparator is read, 0-run

length is obtained by counting the number of successive '0' coefficients.

14. An image data compressing device having

a data quantizing device for quantizing orthogonal transformed coefficients by using a quantizing table, said data quantizing device comprising:

a comparing unit for deciding whether or not quantized coefficients will be '0' by comparing said orthogonal transformed coefficients with corresponding coefficients in said quantizing table; and

a control unit for controlling so that only said orthogonal transformed coefficients with said quantized coefficients of not '0' may be quantized.

15. An image data compressing device as claimed in claim 14, wherein

said comparing unit includes:

a shift circuit for shifting said orthogonal transformed coefficients as binary data by one bit toward an upper bit side, and

a comparator for comparing the orthogonal transformed coefficients thus shifted with the corresponding coefficients in said quantizing table, and

outputting as bit data results of comparison deciding whether or not said quantized coefficients will be '0', and

said control unit comprises:

a quantization predicting register for storing decided results of comparison indicative of whether or not said quantized coefficients will be '0',

a memory for storing said orthogonal transformed coefficients,

a read control circuit for reading the decided results of comparison from said quantization predicting register and causing only the orthogonal transformed coefficients with the quantized coefficients of not '0' to be read from said memory, and

a quantizer for dividing the orthogonal transformed coefficients read from said memory with the corresponding coefficients in said quantizing table so as to output quantized results.

16. An image data compressing device as claimed in claim 14, wherein

said comparing unit comprises:

a shift circuit for shifting said orthogonal transformed coefficients as binary data, and

a comparator for comparing the orthogonal

transformed coefficients thus shifted with the corresponding coefficients in said quantizing table; outputting '0' in case where the comparator decides that the quantized coefficients will be '0'; and outputting said orthogonal transformed coefficients in case where it decides that the quantized coefficients will not be '0', and wherein

said control unit comprises:

a memory for storing output of said comparator, and

a quantizer for quantizing only the orthogonal transformed coefficients of not '0' read from said memory by dividing them by the corresponding coefficients in said quantizing table.